WO 2005/059486 PCT/US2004/041358

Claims:

1. A patient support comprising:

- a frame;
- a deck supported by the frame;
- a mattress supported by the deck;

an inflatable cell operatively coupled to the mattress and configured to contain a fluid;

an air source configured to inflate the inflatable cell;

a pressure sensor configured to measure a pressure of the fluid in the inflatable cell; and

a controller coupled to the pressure sensor and the air source, the controller configured to determine a weight of a patient positioned on the patient support, and control the air source in response thereto.

- 2. The patient support of claim 1, wherein the inflatable cell is positioned below the mattress.
- 3. The patient support of claim 1, wherein the mattress includes a foam material.
- 4. The patient support of claim 1, wherein the mattress includes at least one inflatable bladder.
- 5. The patient support of claim 4, wherein the inflatable cell is positioned within the at least one inflatable bladder of the mattress.
- 6. The patient support of claim 1, wherein the mattress includes a head section, a seat section, and a foot section and the inflatable cell is positioned within the seat section.
- 7. The patient support of claim 1, wherein the mattress includes a head section, a seat section, and a foot section and the inflatable cell is positioned under the seat section.
- 8. The patient support of claim 1, further comprising a collector plate wherein the inflatable cell is placed below the collector plate.
- 9. The patient support of claim 1, wherein the mattress includes a first section and a second section positioned under the first section.

WO 2005/059486 PCT/US2004/041358

10. The patient support of claim 1, wherein the inflatable cell is positioned between the first and second mattress sections.

- 11. The patient support of claim 10, wherein the first and second mattress sections include a foam material.
- 12. The patient support of claim 4, wherein the controller is configured to adjust a pressure of the at least one inflatable bladder.
- 13. The patient support of claim 13, wherein the controller is configured to adjust the pressure of the at least one inflatable bladder based upon the patient's weight.
- 14. The patient support of claim 14, wherein the controller is configured to automatically adjust the pressure of the at least one inflatable bladder after determining the patient's weight.
- 15. The patient support of claim 1, further comprising a display configured to display the patient's weight.
- 16. A method of determining a weight of a patient positioned on a patient support, the patient support including a frame, an inflatable mattress positioned on the frame, the method comprising the steps of:

providing an inflatable cell adjacent to the mattress, a pressure sensor coupled to the inflatable cell and configured to measure a pressure inside the inflatable cell, and a controller configured to receive input from the pressure sensor,

measuring the pressure inside the inflatable cell; deflating the inflatable cell to a predetermined pressure; inflating the inflatable cell for a predetermined time period; and measuring the pressure in the inflatable cell.

- 17. The method of claim 16, further comprising the step of comparing the measured pressure of the inflatable cell with a comparison table.
- 18. The method of claim 17, further comprising the step of determining the weight of the patient positioned on the patient support based on the measured pressure.
 - 19. An apparatus including: an inflatable mattress;

WO 2005/059486 PCT/US2004/041358

an inflatable bladder;

a pressure sensor coupled to the inflatable bladder and configured to output a signal indicative of the pressure in the inflatable bladder; and

a controller configured to receive the signal and control the pressure in the inflatable mattress based on the signal.

20. A method of detecting when a patient has exited a patient support, the method including the steps of:

providing a patient support including a mattress and an inflatable cell; monitoring the pressure in the inflatable cell; and actuating a signal when the pressure in the inflatable cell drops.

15